The Examiner is further thanked for pointing out the typographical error in claims 42, 47, 73, 78, 113, 115, 120, 122 and 183 which has been corrected by amendment. Copies of the references which the Examiner indicated as being missing from the official file wrapper of the application are being submitted herewith.

Regarding the merits of the case, claims 96, 106 and 201 were rejected under 35 USC 102(b) as being anticipated by P. Nordin "A Compiling Genetic Programming System that Directly Manipulates the Machine Code" (1994).

Claims 96 and 201 are similar to claims 39 and 1 of allowed U.S. patent application serial no. 08/674,337 (the '337 application) respectfully. Claims 39 and 1 of the '337 application were placed in condition for allowance by adding a limitation which requires that the program instruction include run time data as set forth in original '337 claims 59 and 79.

Claims 96 and 201 have been amended to include this limitation. Applicants concurs with the Examiner that this limitation distinguishes the scope of the claimed invention in the '337 application over the prior art, and submit that it distinguishes claims 96 and 201 in the present application over the prior art as well.

It is therefore respectfully submitted that the amendment to claims 96 and 201 renders these claims allowable over the Nordin reference under 35 USC 102(b). Claim 106 is believed to be allowable due to its dependence from claim 96. The subclaims which depend from claims 96 and 201 are also believed to be allowable on their own merits as well as due to their dependence from claims 96 and 201.

Claims 201, 96 and 106 were indicated as conflicting with claims 1, 39, 45 and 48 of the '337 application under 37 CFR 1.78(b). Applicants respectfully submit that there is good and sufficient reason why these claims should be pending in the present

application, and request that the requirement to cancel these claims under the provisions of MPEP 822 be withdrawn.

Claim 96 is similar to claim 39 of the '337 application. However, present claim 96 includes two limitations which are not present in '337 claim 39. These limitations are as follows.

- (h) altering the entity as data such that the binary number is changed to represent a different directly executable machine code program instruction to the processor; and
- (i) repeating steps (c) to (h) until an end criterion is reached.

Applicants concur that step (h) of present claim 96 is recited in '337 claims 45 and 48, and that the step of making a copy of the entity which is recited in present claim 106 is found in '337 claim 48 as pointed out by the Examiner. However, step (i) of present claim 96 does not have a counterpart in any of the claims which depend from claim 39 in the '337 application. This limitation requires that steps (c) to (h) be repeated until an end criterion is reached.

It is therefore respectfully submitted that the limitation defined by step (i) in present claim 96 provides a clear line of demarcation between the applications, and requested that the requirement to cancel claims 96 and 106 be withdrawn.

Present claim 201 is comparable to claim 1 of the '337 application. These claims differ in that present claim 201 requires that the method be Turing complete and that the computer on which the method is performed also be Turing complete.

The presently claimed system is made Turing complete though the addition of branching instructions as described in the present specification starting at page 40, line 5. This capability increases the flexibility and power of the system by enabling subroutines, leaf functions, external function calls, recursion, loops, and other types of conditional operations. There is no disclosure in the '337 application of Turing completeness. It is therefore respectfully submitted that the limitation of Turing completeness in present claim 201 provides a clear line of demarcation between the applications, and requested that the requirement to cancel claim 201 be withdrawn.

Claims 96, 106 and 201 were provisionally rejected under the judicially created doctrine of obviousness type double patenting. The Examiner is thanked for his suggestion that this rejection could be overcome by filing a terminal disclaimer.

Applicants respectfully submit that a terminal disclaimer is not applicable in this case because the present application and the '337 application were filed on the same date, more specifically July 12, 1996. Thus, the patents issuing from these applications will expire on the same date as set forth in 35 USC 154 (a)(2), and there is no term in either of the patents to disclaim.

In view of the fact that the Examiner does not consider present claims 96, 106 and 201 to be identical to '337 claims 1, 39, 45 and 48 as evidenced by the provisional obviousness double patenting rejection, Applicants respectfully submit that claims 96, 106 and 201 may be allowed with propriety since they are different from the claims of the '337 application and no prolongation of the patent monopoly will result because the two patents will expire on the same date.

In summary, Applicants submit that the amendment to the claims, taken in view of the above remarks, obviates the grounds for rejection of the claims and places the application in condition for allowance. Concurrence by the Examiner and early passage of the application to issue are respectfully requested.

Any additional fees required in connection with this communication which are not specifically provided for herewith are authorized to be charged to deposit account no. 02-3975 in the name of Bronson, Bronson & McKinnon. Any overpayments are also authorized to be credited to this account.

Serial No. 08/682,859

Page 7

Respectfully submitted,

Date Feb. 19,1888

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